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FIRST ANNUAL REPORT

OF THE

MARYLAND AGRICULTURAL EXTENSION SERVICE

FOR THE

YEAR ENDING JUNE 30, 1915

MARYLAND AGRICULTURAL COLLEGE AND U. S. DEPARTMENT
OF AGRICULTURE COOPERATING

THE MARYLAND AGRICULTURAL EXTENSION SERVICE

UNDER THE CONTROL OF

THE BOARD OF TRUSTEES

OF

MARYLAND AGRICULTURAL COLLEGE

OFFICERS, EXTENSION SPECIALISTS AND AGENTS

H. J. PATTERSON, *President of College.*

*T. B. SYMONS, *Director.*

†N. Schmitz, Agronomy.
W. T. L. Taliaferro, Farm Management.
*G. H. Alford, County Demonstration Work.
*G. E. Wolcott, Dairy Husbandry.
C. E. Temple, Plant Pathology.
S. B. Shaw, Pomology.
†C. L. Opperman, Poultry Husbandry.
*Katharine Pritchett, Home Economics.
*Reuben Brigham, Boys' Club Work.
Florence J. Hunt, Home Economics.
†F. B. Bomberger, Rural Organization.
†C. S. Richardson, Rural Organization.
†H. T. Harrison, Farm Accounts.
†T. H. Taliaferro, Rural Engineering.
†Harry Gwinner, Farm Mechanics.
†Myron Creese, Electric Light and Power.
W. Hillegeist, Correspondence Courses.

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*COUNTY DEMONSTRATION AGENTS.

Allegany—John McGill, Jr.
Anne Arundel—H. C. Whiteford.
Baltimore—J. F. Hudson.
Calvert—John H. Drury.
Cecil—G. F. Marsh.
Charles—W. R. Linthicum.
Dorchester—Gilbert B. Porter.
Queen Anne—H. S. Koehler.
Somerset—H. S. Lippincott.
St. Mary's—G. F. Wathen.
Talbot—E. P. Walls.
Worcester—J. F. Monroe.

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*HOME DEMONSTRATION AGENTS.

Allegany—Mrs. Leona H. Powell.
Anne Arundel—Miss M. Iglehart.
Harford—Miss Eleanor Heuer.
Kent—Miss Helen Comstock.
Montgomery—Miss Isabel Kingdon.
Talbot—Mrs. Olive K. Walls.

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*In cooperation with U. S. Dept. of Agriculture.
†Devoting only part time to extension work.

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YEAR ENDING JUNE 30, 1915

MARYLAND AGRICULTURAL COLLEGE AND U. S. DEPARTMENT
OF AGRICULTURE COOPERATING

LETTER OF TRANSMITTAL

To His Excellency, Emerson C. Harrington,
Governor of Maryland:

In accordance with the requirements of the Act of Congress, approved May 8, 1914, and known as the Smith-Lever Act, I have the honor to submit herewith Report on the work of the Agricultural Extension Service of the Maryland Agricultural College, in cooperation with the U. S. Department of Agriculture, for the fiscal year ending June 30, 1915.

Respectfully submitted,

THOMAS B. SYMONS,
Director Extension Service.

College Park, Md.,
January, 1916.

FIRST ANNUAL REPORT

of the

Maryland Agricultural Extension Service

For the Year Ending June 30, 1915.

By THOMAS B. SYMONS, *Director.*

The Extension Service of the Maryland Agricultural College was organized July 1st, 1914. While much extension work was conducted through the various departments of the Institution, prior to this date, yet, the work was not coordinated into a distinct Division. The Smith-Lever Bill, which provided for an appropriation of certain funds for extension and demonstration work in Agriculture and Home Economics, designated that said funds be expended through such a Division at the State Agricultural College.

The function of the Extension Service is to carry information to the people. Its main purpose is to increase our agricultural resources by increasing the productiveness of our lands, through the development of greater efficiency in our farmers, and to promote a larger measure of contentment and happiness in our farm homes, by aiding the home-maker. In promoting these ends, the material and social development of the masses of people living in the country will be accomplished.

The Extension Service strives to make agricultural education more real to the masses. Its goal shall be a higher appreciation of rural education in its broadest sense by the people, and its adaptability to every-day living. The success of the Service reflects upon the College and Experiment Station, and the U. S. Department of Agriculture, from which such activities and information emanate.

Though the organized effort to carry information to the people is a little more than a year old, great strides have been made in perfecting the organization, the work and in accomplishing results.

There is no doubt of the definite field for such work. There is no doubt as to the practical results to be secured. There remains only the unlimited field for increased efficiency in conducting the work, its proper coordination with cooperating agencies and the constant demand in agricultural education to make it more real to the masses of farmers. There are many phases of extension work that have not as yet been touched through lack of funds. The many phases of work already undertaken are demanding increased facilities. To carry out this ideal on the 50,000 farms of Maryland is a big problem, and one

that will require the deepest thought on the part of all who are engaged in any phase of agricultural education. It is one thing to project an idea or to ascertain a fact in science, and quite another to put that idea into successful practice on the farm. It is one thing to increase production, and quite another to sell the increase at a remunerative price. It is one thing to suggest changes in the conduct of a home, and quite another to develop a more happy and contented home as the result of the suggestion.

The opportunities and possibilities of the Extension Service are so great that it will require careful scrutiny of the lines of work which will be deemed wise to emphasize at the beginning, when our funds are quite limited, for the best interests of the people, as well as the Institution. The field is broad, and the work of a permanent character. Our aim is to do well whatever is undertaken, so that perfect confidence shall be established among the people. By this means, the usefulness of the Service will be as lasting as investigation and instruction work in agriculture and allied sciences.

The proper ideal of an Extension Service is expressed in its name, to "extend service" to everyone within its reach throughout the State. The aim of the Service is to demonstrate facts, increase incomes and make more happy homes.

Historical.

A review of early literature reveals that Maryland was among the earliest of States to recognize the importance of aiding in the development of her agricultural resources and assisting the farmers of the State by conducting investigations in agricultural science, and in disseminating such ascertained facts through publications, meetings, demonstrations and otherwise.

The first legislation providing for such work was enacted by the Maryland Legislature during the session of 1847, making provision for the appointment of a State Chemist, and prescribing his duties as follows:

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That the Governor by and with the advice and consent of the Senate, shall hereafter annually appoint and commission a person of ability, integrity and suitable practical and scientific attainments, as Agricultural Chemist for the State, and if the Senate shall have adjourned before the Governor shall make the appointment for the present year, or if a vacancy shall hereafter occur during the recess of the Senate, then the Governor alone shall make such appointment, which shall be good and valid until the tenth day after the meeting of the Senate.

SEC. 2. *Be it enacted,* That the State shall be divided into three districts; the first shall comprise that part of the State now comprised in the first Gubernatorial district; the second that of the third Gubernatorial district; and the third that of the second Gubernatorial district.

SEC. 3. *Be it enacted,* That the said Agricultural Chemist, shall spend one year, the first beginning on the date of his appointment, in each of said districts in the order named, it shall also be his duty to spend one month in each county and Howard District, and visit each election district.

SEC. 4. *Be it enacted,* That it shall be the duty of said Agricultural Chemist, to analyze specimens of each variety of soil of the county in which he shall be, that may be brought to him or that he may find to exist, and also to examine and if

necessary analyze specimens of each kind of marl or other vegetable or mineral deposit that may come to his knowledge, in order that his instructions may be of more practical utility.

SEC. 5. *Be it enacted,* That it shall also be his further duty to deliver one public lecture, after having given timely notice thereof, in each election district in each county, and then to deliver a course of public lectures at each county town, and at some central place in Baltimore County, after having given also sufficient notice thereof in each election district, and he shall also permit the clerk of the levy court or the commissioners of tax as the case may be, to take a copy of such course of lectures, to be retained and kept for the use and benefit of the county, and published by said levy court or commissioners of the tax if to them it shall seem expedient.

SEC. 6. *Be it enacted,* That the said chemist shall make an annual report to the House of Delegates if in session, and if not then to the Governor, whose duty it shall be to cause the same to be published, of his proceedings, and such other matters touching the agricultural interest of the State, as may be considered necessary.

SEC. 7. *And be it enacted,* That for the faithful discharge of his duties, the said chemist shall receive the annual salary of fifteen hundred dollars, to be paid as the salaries of other officers are or may be paid, and for the purchase of chemical implements and materials, the said chemist shall be allowed for the first year, the sum of two hundred dollars in advance, and on each succeeding year a sum not exceeding fifty dollars, out of such monies as may be in the Treasury not otherwise appropriated.

This Bill was introduced by Mr. T. D. Coad, of St. Mary's County, Chairman of the Committee on Agriculture. It is seen that, not only did this law provide for investigational work, but also for what was later and now known as Farmers' Institute work. Moreover, in Section 5, cooperation with County authorities was suggested, as is now entered into in the conducting of County Agent work.

This legislation was followed in 1856 by the law providing for the establishment of an agricultural college and model farm. The Maryland Agricultural College is thus the first chartered institution of its kind in America.

AGRICULTURAL ASSOCIATIONS.

Several local organizations throughout the State from earliest times have aided in the dissemination of agricultural information through meetings, exhibitions, etc. The Agricultural Society for the Eastern Shore was organized in 1818. One of the first Farmers' Clubs in the State was organized in 1842 at Sandy Spring, Montgomery County. The Enterprise Farmers' Club of that vicinity celebrated its Fiftieth Anniversary this year. These Farmers' Clubs and others in different sections of the State, have been potent factors in developing the agriculture of the community.

Maryland was among the first States to aid in the organization of the National Grange, which organization celebrates its Fiftieth Anniversary this year. Our earliest Subordinate Granges were also established in Montgomery County. The Grange has aided greatly in the past, and is a most potent factor at present in promoting agriculture and social life in various sections of the State.

The Peninsula Horticultural Society was established in 1887. This Society, whose membership consisted of fruit-growers, truckers and farmers of the Eastern Shore and Delaware, has been quite a factor in developing this industry on the Eastern Shore of the State.

The Maryland State Horticultural Society was organized in 1898.

Though comparatively recent, it has accomplished much in promoting the horticultural industry of the State, through the holding of annual meetings and exhibitions and issuing reports. The Society was organized following the outbreak of the San Jose Scale in the State, and it was the main factor in securing legislative support for the industry. Later, the Maryland Crop Improvement Association, State Dairymen's Association and Beekeepers' Association were formed, and since about 1909 these Associations have held a joint exhibition and meetings in Baltimore, out of which has grown the great "Maryland Week" meetings and exhibition, which has been a decided stimulus towards improving standards and production of various crops.

Various other organizations in different parts of the State have greatly aided in the development of agriculture through the holding of County Fairs, including the Baltimore Agricultural Society, the Hagerstown and Frederick Fair Associations, and many others.

Work Conducted by the College and Station.

Extension work has been conducted by the College and Station for many years. The first regular Farmers' Institute held under this name, was conducted under the auspices of the Experiment Station and Brighton Grange during the winter of 1890. In 1894, the Maryland Legislature passed a law providing for the holding of Farmers' Institutes in all the Counties of the State, and placing the Director of same under the Trustees of the College. Farmers' Institutes have been conducted in the State each year since that date, and they have been a great force in arousing the farmers to an appreciation of adopting scientific methods of agriculture. Many other departments of the College and Station have conducted extension and demonstration work for many years. A general historical statement by Dr. H. J. Patterson, in the 16th Annual Report of the Experiment Station, 1902-03, refers to the many lines of work completed and in progress by the Experiment Station, and its bearing upon the development of agriculture in the State at that time.

The carrying of these results to the people through various forces of extension and demonstration work has been emphasized more and more during succeeding years to 1914. The inauguration of regular demonstration work in the improvement of corn, according to our records, began in 1903, and in the growing of alfalfa in 1905. Demonstrations in the improvement of wheat, winter oats, and other forage crops were commenced in 1910. In 1903, the first regular pruning and spraying demonstrations were conducted. All of this work has been continued as well as work in small fruits, dairying, poultry husbandry, forage crops, etc.

Instructors at the College and specialists at the Station have for many years aided in extension work, through addressing farmers' meetings, and personal visits to farms in all parts of the State, forming organizations, conducting short courses, etc.

During 1912, the Department of Agriculture inaugurated extension work through County demonstration Agents in the Counties of southern Maryland, and later, 1913, extended its work to other sections of the State.

This is an inadequate statement regarding the great amount of work accomplished by the College and Station, and other agencies prior to the formation of the Extension Division, but serves to show the development and general lines of work prosecuted.

The Smith-Lever Extension Act.

The Smith-Lever Extension Act was passed by Congress and approved by the President, May 8th, 1914. This Act provides Federal aid for extension work similar to the Morrill, Hatch, Adams and Nelson Acts for College and Station work. It also requires that States appropriate equal amounts for this work to offset the Federal appropriation.

There has been so much misunderstanding regarding the requirements of this law that it is deemed wise to publish the Act in full.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive, the benefits of the Act of Congress approved July second, eighteen hundred and sixty-two, entitled "An Act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts" (Twelfth Statutes at Large, page five hundred and three), and of the Act of Congress approved August thirtieth, eighteen hundred and ninety (Twenty-sixth Statutes at Large, page four hundred and seventeen and chapter eight hundred and forty-one), agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture: *Provided*, That in any State in which two or more such colleges have been or hereafter may be established the appropriations hereinafter made to such State shall be administered by such college or colleges as the Legislature of such State may direct: *Provided further*, That, pending the inauguration and development of the cooperative extension work herein authorized, nothing in this Act shall be construed to discontinue either the farm management work or the farmers' cooperative demonstration work as now conducted by the Bureau of Plant Industry of the Department of Agriculture.

Sec. 2. That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this Act.

Sec. 3. That for the purpose of paying the expenses of said cooperative agricultural extension work and the necessary printing and distributing of information in connection with the same, there is permanently appropriated, out of any money in the Treasury not otherwise appropriated, the sum of $480,000 for each year, $10,000 of which shall be paid annually, in the manner hereinafter provided, to each State which shall by action of its Legislature assent to the provisions of this Act: *Provided*, That payment of such installments of the appropriation hereinbefore made as shall become due to any State before the adjournment of the regular session of the Legislature meeting next after the passage of this Act may, in the absence of prior legislative assent, be made upon the assent of the Governor thereof, duly certified to the Secretary of the Treasury: *Provided further*, That there is also appropriated an additional sum of $600,000 for the fiscal year following that in which the foregoing appropriation first becomes available, and for each year thereafter for seven years a sum exceeding by $500,000 the sum appropriated for each preceding year, and for each year thereafter there is permanently appropriated for each year the sum of $4,100,000 in addition to the sum of $480,000 hereinbefore provided: *Provided further*, That before the funds herein appropriated shall become available to any college for any fiscal year plans for the work to be carried on under this Act shall be

submitted by the proper officials of each college and approved by the Secretary of Agriculture. Such additional sums shall be used only for the purposes hereinbefore stated, and shall be allotted annually to each State by the Secretary of Agriculture and paid in the manner hereinbefore provided, in the proportion which the rural population of each State bears to the total rural population of all the States as determined by the next preceding Federal census: *Provided further*, That no payment out of the additional appropriations herein provided shall be made in any year to any State until an equal sum has been appropriated for that year by the Legislature of such State, or provided by State, county, college, local authority, or individual contributions from within the State, for the maintenance of the cooperative agricultural extension work provided for in this Act.

SEC. 4. That the sums hereby appropriated for extension work shall be paid in equal semi-annual payments on the first day of January and July of each year by the Secretary of the Treasury upon the warrant of the Secretary of Agriculture, out of the Treasury of the United States, to the treasurer or other officer of the State duly authorized by the laws of the State to receive the same; and such officer shall be required to report to the Secretary of Agriculture, on or before the first day of September of each year, a detailed statement of the amount so received during the previous fiscal year, and of its disbursement, on forms prescribed by the Secretary of Agriculture.

SEC. 5. That if any portion of the moneys received by the designated officer of any State for the support and maintenance of cooperative agricultural extension work, as provided in this Act, shall by any action or contingency be diminished or lost, or be misapplied, it shall be replaced by said State to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to said State, and no portion of said moneys shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building or buildings, or the purchase or rental of land, or in college-course teaching, lectures in colleges, promoting agricultural trains, or any other purpose not specified in this Act, and not more than five per centum of each annual appropriation shall be applied to the printing and distribution of publications. It shall be the duty of each of said colleges annually, on or before the first day of January, to make to the Governor of the State in which it is located a full and detailed report of its operations in the direction of extension work as defined in this Act, including a detailed statement of receipts and expenditures from all sources for this purpose, a copy of which report shall be sent to the Secretary of Agriculture and to the Secretary of the Treasury of the United States.

SEC. 6. That on or before the first day of July in each year after the passage of this Act the Secretary of Agriculture shall ascertain and certify to the Secretary of the Treasury as to each State whether it is entitled to receive its share of the annual appropriation for cooperative agricultural extension work under this Act, and the amount which it is entitled to receive. If the Secretary of Agriculture shall withhold a certificate from any State of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the expiration of the Congress next succeeding a session of the Legislature of any State from which a certificate has been withheld, in order that the State may, if it should so desire, appeal to Congress from the determination of the Secretary of Agriculture. If the next Congress shall not direct such sum to be paid, it shall be covered into the Treasury.

SEC. 7. That the Secretary of Agriculture shall make an annual report to Congress of the receipts, expenditures, and results of the cooperative agricultural extension work in all of the States receiving the benefits of this Act, and also whether the appropriation of any State has been withheld; and if so, the reasons therefor.

SEC. 8. That Congress may at any time alter, amend, or repeal any or all of the provisions of this Act.

Approved, May 8, 1914.

STATE'S ACCEPTANCE.

Governor P. L. Goldsborough, on the part of the State of Maryland, legally accepted the benefits of this Act, June 4th, 1914, and designated the Maryland Agricultural College as the proper Institution to administer the funds.

The Legislature of 1916 passed the following Bill which was approved by Governor Harrington, as a formal acceptance on the part of the State.

A BILL ENTITLED

AN ACT to assent to the Act of Congress at the second session of the Sixty-third Congress, known as the Smith-Lever Bill, H. R. 7951, approved by the President May 8, 1914, entitled "An Act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an Act of Congress, approved July second, eighteen hundred and sixty-two, and the Acts supplementary thereto, and the United States Department of Agriculture.

WHEREAS, By an Act of Congress passed at the second session of the Sixty-third Congress of the United States, the Smith-Lever Bill, H. R. 7951, approved by the President May 8, 1914, entitled "An Act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an Act of Congress, approved July second, eighteen hundred and sixty-two, and of Acts supplementary thereto, and the United States Department of Agriculture"; and

WHEREAS, Said Act of the second session of the Sixty-third Congress provides that before funds as made available under the said Act shall be paid to any State, such State shall give its legislative assent to the purposes of said grants; and

WHEREAS, The Maryland Agricultural College is the only institution in Maryland established under the provisions of the Act of Congress, approved July second, eighteen hundrd and sixty-two, and of the Acts supplementary thereto; therefore,

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That the assent of the State of Maryland be, and the same is hereby given to the purposes, provisions and requirements of the grant made by said Act, H. R. No. 7951 of the second session of the Sixty-third Congress, approved by the President May 8, 1914, and that the Maryland Agricultural College be, and the same is hereby designated as the institution entitled to receive the benefits of the said Act and the trustees of the said Maryland Agricultural College be, and they are hereby authorized and empowered to receive the grants of money appropriated under said Act, and to organize and conduct the Agricultural Extension work which shall be carried on in connection with said College or the State of Maryland in accordance with the terms and conditions expressed in the Act of Congress aforesaid.

SEC. 2. *And be it enacted,* That the assent of the State of Maryland to the grants of money for the purposes, upon the terms and in accordance with the several conditions and provisions contained in said Act, is hereby signified and expressed and the Secretary of the State is hereby directed to transmit a certified copy of this Act to the Treasurer of the United States and to the Secretary of Agriculture of the United States.

SEC. 3. *And be it enacted,* That this Act shall take effect from June 1st, 1916.

In addition to providing direct Federal appropriations to the State for extension work, the Smith-Lever Act provided for cooperation between the U. S. Department of Agriculture and the various States in administering any funds appropriated by Congress direct to the U. S. Department of Agriculture for extension work in Maryland, with the view of economy and efficiency.

Therefore, in accordance with this provision, and after the acceptance of the grant by State, the President of the Maryland Agricultural College and the Secretary of Agriculture of the United States, entered into the following Memorandum of Understanding, with reference to cooperative relations between the College and the U. S. Department of Agriculture, for the organization and conduct of extension work in Agriculture and Home Economics in the State of Maryland.

Memorandum of Understanding.

WHEREAS, The Maryland Agricultural College has, or may hereafter have under its control, Federal and State funds for extension work in agriculture and home economics, which are or may be supplemented by funds contributed for similar purposes by counties and other organizations and individuals within said State, and the United States Department of Agriculture has, or may hereafter have, funds appropriated directly to it by Congress which can be spent for demonstration and other forms of extension work in the State of Maryland.

THEREFORE, With a view of securing economy and efficiency in the conduct of extension work in the State of Maryland, the President of the Maryland Agricultural College, acting subject to the approval of the Board of Trustees of said College, and the Secretary of Agriculture of the United States hereby make the following memorandum of understanding with reference to cooperative relations between said College and the United States Department of Agriculture in the organization and conduct of extension work in agriculture and home economics in the State of Maryland.

I. The Maryland Agricultural College agrees:

(1) To organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, with a responsible leader selected by the College satisfactory to the Department of Agriculture.

(2) To administer through such Extension Division thus organized any and all funds it has or may hereafter receive for such work from appropriations made by Congress or the State Legislature, by allotment from its Board of Trustees or from any other source.

(3) To cooperate with the United States Department of Agriculture in all extension work in agriculture and home economics which said Department is or shall be authorized by Congress to conduct in the State of Maryland.

II. The United States Department of Agriculture agrees:

(1) To organize and maintain in the Department of Agriculture a States Relations Committee pending the authorization by Congress of a States Relations Service, which shall represent the Department in the general supervision of all cooperative extension work in agriculture and home economics which the Department shall participate in in the State of Maryland, and shall have charge of the Department's business connected with the administration of all funds granted to the States under the Smith-Lever Act.

(2) To carry on in cooperation with the Maryland Agricultural College all demonstration and other forms of extension work in agriculture and home economics which the Department is authorized by Congress to conduct in the State of Maryland.

III.

(1) That the aforesaid cooperative extension work in agriculture and home economics in the State of Maryland involving the use of direct Congressional appropriations to the Department of Agriculture shall be planned under the joint supervision of the Director of Extension Work of the Maryland Agricultural College, subject to the approval of the President or Dean of said College, and the Special Agent in Charge, Farmers' Cooperative Demonstration Work of the United States Department of Agriculture, subject to the approval of the Secretary of Agriculture or his duly appointed representatives; and that the approved plans for such cooperative extension work in the State of Maryland shall be executed through the Extension Division of the Maryland Agricultural College, in accordance with the terms of the individual project agreements.

(2) That all agents appointed for cooperative extension work in agriculture and home economics in the State of Maryland, under this memorandum and subsequent project agreements, involving the use of direct Congressional appropriations to the Department of Agriculture, shall be joint representatives of the Maryland Agricultural College and the United States Department of Agriculture, unless otherwise expressly provided in the project agreements; and the cooperation as aforesaid shall be plainly set forth in all publications or other printed matter issued and used in connection with the said cooperative extension work by either the Maryland Agricultural College or the United States Department of Agriculture.

(3) That the plans for the use of the Smith-Lever fund, except so far as this fund is employed in cooperative projects involving the use of Department funds, shall be made by the Extension Division of the College but shall be subject to approval of the Secretary of Agriculture in accordance with the terms of the Smith-Lever Act, and when so approved shall be executed by the Extension Division of said College.

(4) That the headquarters of the State organization contemplated in this memorandum shall be at the Maryland Agricultural College, College Park, Maryland.

IV. This memorandum shall take effect when it is approved by the President of the Maryland Agricultural College and the Secretary of Agriculture of the United States and shall remain in force until it is expressly abrogated in writing by either one of the signers or their successors in office.

(Signed) H. J. PATTERSON,
President Maryland Agricultural College.

(Signed) D. F. HOUSTON.
Secretary of Agriculture.

July 15, 1914.

Under this Memorandum arrangements have been made for co-operation in the several lines of work, as indicated by the following projects. Several of these projects have been conducted by specialists who devoted part time to the work. It was desirable, however, even with our limited funds, to do something along the lines of work indicated by the projects.

Project I.—General Organization.
" II.—Administration.
" III.—Printing and Distribution of Publications.
" IV.—County Demonstration Work.
" V.—Boys' Club Work.
" VI.—Home Economics Extension and Girls' Club Work.
" VII.—Agronomy.
" VIII.—Farm Management.
" IX.—Poultry Husbandry.
" X.—Movable Schools.
" XI.—Dairy Husbandry.
" XII.—Rural Organization.
" XIII.—Horticulture.
" XIV.—Plant Diseases.
" XV.—Rural Engineering.

The work of the Service can best be given for the calendar year 1915, as that is the natural means of conducting the work, most of which is conducted through the growing season. The discussion by projects will, therefore, follow those approved for the last fiscal year as well as those for the present year.

Administration.

At present the organization of the Service is, of necessity, incomplete. As additional funds become available, specialists in every Department should be added, devoting their whole time to the Service. Extension work is of such a character that it requires especially adapted men and women, who should devote their utmost ability and energy to its successful prosecution. I, therefore, believe it to be more effective as a general policy to employ fewer whole-time specialists than a large number devoting part of their time to the Service.

Owing to our financial condition during the past two years, and to meet the demands of the people, it has been necessary to have several part-time specialists. During the fiscal year 1914-15, there was available to be expended through the Extension Service, $10,000. direct from Smith-Lever Act, and about $21,000. from the U. S. Department of Agriculture. The $3,000. appropriation from State for demonstration work and about $5,700. of the State Horticultural Fund was devoted to general extension and demonstration work in horticulture. Also about $6,350. was supplied by counties for their share in paying County Agents' salaries. All funds being expended under the dual

direction of the Extension Service of the College and States Relations Service, U. S. Department of Agriculture.

During the fiscal year ending June 30th, 1916, there is available $17,746. from Smith-Lever Fund, $21,000. from the U. S. Department of Agriculture, $3,000. for State Demonstration Fund, $5,700, from State Horticultural Fund, and about $6,460. from County organizations. A budget statement with allotments for all lines of work will be appended to this report.

The relations of the Extension Service to the College and Experiment Station are exceedingly cordial, and every means at the command of these Institutions are extended to assist and cooperate with the Service in the prosecution of its work.

Owing to inadequate buildings the offices and equipment of the Extension Division have necessarily been limited. The growth of the work has required crowding of administration offices. Most of the specialists occupy quarters in the respective departments of the Institution. President Patterson has extended every cooperation at his command to accommodate the workers in the Extension Division.

There are no lines of demarkation between extension workers and members of the College Faculty or Station Staff, from the standpoint of privilege or precedence. On account of limited funds a number of members of the Faculty and heads of respective departments devote part time to extension work.

It is hoped that as the work progresses, the organization will be more compact, and the relations with the Department of Agriculture will be more clearly understood by all forces. There has been a tendency during the past year to have divided responsibility with the Department. It is felt that the Memorandum of Understanding with the Department of Agriculture should be clearly lived up to by both Institutions, and that the work can only best succeed by holding the Director, who is the representative of both Institutions, solely responsible for all the extension work in the State.

Printing and Distribution of Publications.

On account of limited funds, the Extension Division has not as yet been able to publish bulletins, circulars, etc., on its own account. A policy of issuing extension bulletins, similar in style to the Station Bulletins, except in point of view, has been decided upon. It is hoped to publish some needed literature of this character during the coming year.

To date, the Division has been dependent upon various bulletins previously provided, and now being published by the College and Station, and U. S. Department of Agriculture.

A special press bulletin known as "The Farm Adviser," is published bi-monthly. About 26,000 copies have been issued. Much other circular matter in the form of multigraph and neostyle work, together with a large quantity of bulletins and miscellaneous matter

from the U. S. Department of Agriculture, to the amount of about 50,000 pieces, have been distributed. In addition, one column of plate matter has been furnished about 100 newspapers in the State weekly, the latter being provided from other funds.

County Demonstration Work.

This project provides for carrying out all project demonstration work, through specialists, State Agent and male County Agents. Twelve County Agents have pursued this work during the past year. Three additional Counties have provided for the work during 1916. It is believed that this represents commendable progress. More than half the Counties of the State have thus cooperated in the work practically within a year.

The policy of the Division, however, is to not multiply agents at the expense of quality of work performed. It is much better to lend our efforts towards making good in the work in those Counties accepting the same, and depend upon results for inducing other Counties to request such cooperation. The salaries paid County Agents range from $1,200. to $2,300. per annum, with an average of about $1,500. Our hope is to place no other County Agent under a salary of $2,000. Two-thirds of the County Agents at work in Maryland are college men, with extensive practical experience.

From the reports of the State Agent, Mr. G. H. Alford, and County Agents, giving in detail the progress and results of their work during the past year, the following summary of demonstrations and miscellaneous work is taken:

CROP.	No. Demonstrations.	Average Yield Per Acre.	
Corn	114	47.91	Bushels
Wheat	109	23.85	"
Tobacco	4	1200	Lbs.
Winter Oats	40	42	"
Crimson Clover	67	1.5	Tons
	(Value for grazing $2 per acre.)		
Vetch	2		
Alfalfa	113	3.85	Tons
Timothy	28	2.1	"
Alfalfa and Timothy	2	3.75	"
Canada Field Peas and Oats	5	1.25	"
Sudan Grass	38	3.15	"
Cowpeas	107	2.15	"
Soy Beans	58	2.35	"
	(Grain, bus., 16.25.)		
Irish Potatoes	333	90	Bushels
	(Grain, bus., 19.83.)		
ORCHARDS:	178	Instructed in the culture of 294,159 trees.	

DAIRY CATTLE:	36 pure bred dairy bulls and 118 pure bred dairy heifers brought into the State. 541 cows have been tested. 116..Feeding Cattle.
BEEF CATTLE:	8 pure blooded beef bulls and 44 pure blooded heifers have been purchased through the efforts of the County Agents.
HOGS:	186 pure blooded hogs have been bought and 14 herds of pure bred hogs have been started.
SHEEP:	7 head of pure bred dams and 80 head of pure bred ewes have been purchased through the efforts of the demonstrators.
LIVE STOCK DISEASES AND PESTS:	15,817 head of live stock have been treated for diseases or pests by the suggestion of the County Agents and Specialists. 12 have been treated for tuberculosis. 200 for lice. 208 for worms. 20 for digestive troubles. 15,135 hogs have been treated for hog cholera through the efforts of County Agents.
FERTILIZERS: 75 Demonstrations:	121 farmers top-dressed crops with fertilizers at the suggestion of County Agents.
MANURE:	256 farmers will carry out the suggestions of the Agents relative to the care of farm manure. 1,445 manure spreaders are in use on demonstration farms.
SILOS:	220 silos were built under the direction of County Agents.
LIME:	396 farmers have used lime under the direction of the County Agents.
ORGANIZATION:	30 farmers' organizations have been perfected by the agents during the year.

1.—Number of visits by County Agents to demonstrators, cooperators, other farmers and business men, 10,148.
2.—Number of miles traveled by agents, 107,449.
3.—Calls on agents relative to work at office or home as—Personal, 2,546; Telephone, 1,494.
4.—Number of farmers' meetings held under auspices of agent or Division, 539.
5.—Number of meetings addressed by County Agents, 792.
6.—Total attendance at such meetings, 42,715.
7.—Number field meetings held, 364.
8.—Total attendance at these meetings, 23,184.
9.—Number official letters written, 12,228.
10.—Number circular letters prepared and distributed, 95.
11.—Number of bulletins, circulars of State and United States Department of Agriculture distributed, 21,699.

The State Agent summarizes his personal work as follows:

Meetings held	77
Attendance at meetings	8,527
Visits to County Agents	71
Visits to demonstration farms	156
Miles traveled	15,516
Official letters dictated	2,757
Copies of circular letters, addresses, etc., mailed out	34,800
Conferences held	225

We believe that the Service has been exceedingly fortunate, on the whole, in securing an unusually strong force of workers, including specialists and agents and with the continued policy of securing adequate funds to command the services of trained men, we hope to further strengthen the force of County Agents.

In this connection, it is believed that the policy of dependence upon the County Commissioners for half support of the work, is an unstable one. In addition to other difficulties which may confront the County Agent, this feature of maintenance robs the work of the stability with which it should be clothed. We are hoping to have the present legislature make a direct appropriation to the Institution, providing the funds which are now contributed by the Counties. By this means, the position of County Agents will be more secure and their work can be planned on a more permanent basis.

Another question of policy seems advisable to determine as soon as practicable, viz.,—we believe that all County Agents should be allowed a distinct account for traveling expenses. This will prevent the possibility of discrimination on the part of the Agent, in trips, visits, or other work needed in different sections of a County. Under present conditions, agents are very apt to select calls or visits which entail the least expense, notwithstanding the need of the case.

There are many matters of policy constantly coming up for consideration in inaugurating the work.

Boys' Club Work.

This project has been in charge of Mr. Reuben Brigham, who was appointed to take up this work June 1st, 1915. Prior to that time the preliminary work was done by Mr. Alford and the County Agents.

The following is a summary of the work:

Boys' Corn Clubs.

Total number of boys enrolled in State	320
Total number of boys reporting in State	93
Total number of bushels reported in State	7,057.79
Total cost	$2,393.062
Average cost per bushel	33.8c
Average number of bushels per acre	57.1

Boys' Potato Clubs.

Total number of boys enrolled in State	22
Total number of boys reporting in State	8
Total number of bushels reported in State	274.32
Total cost	$234.04
Average cost per bushel	85c
Average number of bushels per acre	151.603

Meetings Held	37
Attendance at Meetings	3,097
Visits to County Agents	20
Visits to Demonstration Farms	143
Miles Traveled	6,964

Five Highest Yields.

Name:	Town:	County:	Yield:	
William Troy	Centreville	Queen Anne's	105	Bushels
Alonzo Phillips	Trappe	Talbot	104	"
James M. Cosden	Longwoods	Talbot	102	"
Arthur Potts	Chestertown	Queen Anne's	95	"
Howard Harding	Cambridge	Dorchester	90.5	"

All prize winners were given an opportunity to visit the annual meetings and exhibition of the affiliated agricultural associations in Baltimore during "Maryland Week," November 16-20, 1915.

This is simply mentioned to show a realization on the part of the business interests and press of the State, of the importance of this movement. The equivalent of between $600. and $700. was raised by contributions of business men towards defraying the expenses of entertaining the prize winners. Plans are already under way for creating a much greater interest another year.

While we wish to continue to emphasize the club work in corn and potatoes, we hope it may be possible to extend the work, by forming pig and other clubs, as means will permit.

The success of the club work depends largely upon the cooperation of County School Superintendents, and school teachers, especially the teachers of agriculture in the rural schools. As funds will permit, we believe it to be a good policy to employ the agricultural teachers during the summer months, to supervise the local agricultural clubs. This will not only serve to correlate the work with the school, but will aid in developing community organizations, which are the greatest assets in extending the usefulness of all extension work.

Mr. Brigham reports having established local agricultural clubs under the leadership of the agricultural teachers in Prince George's, Carroll and Frederick Counties.

Home Economics Extension and Girls' Club Work.

The Smith-Lever Bill provides for instruction and demonstrations in Home Economics as well as Agriculture. It is, therefore, our duty as well as our privilege to aid the home-maker, as well as the farmer, and we believe herein lies a fruitful field for promoting farm life in this State. Not only is it our desire to eliminate drudgery in its real sense from our farm homes, but improve sanitary conditions in and around the home, and lessen hours of labor, so that the farmer's wife may have more time to devote to the aesthetic aspects of the home, as well as in rearing our coming generations. This will lead to community building and generally to more contentment in the country.

After considerable delay, occasioned by our desire to launch the Home Economics work on a broad and comprehensive basis, by the employment of a thoroughly trained woman, we were able to secure the services of Miss K. A. Pritchett, of Teachers' College, Columbia University, to start the work, May 15th, 1915. Miss Florence Hunt, of the University of Illinois was secured later to assist Miss Pritchett.

The work has been launched under many difficulties, and it is believed that good progress has been made. The women of the State, for the most part, demand a high type of work.

Miss Pritchett reports a summary of work as follows:

Number of Counties organized May 8th-Sept. 10	6
Number of Counties organized on yearly basis	3
Number of County Agents employed	6
Number of Club girls enrolled	700
Number of women enrolled	113
Number of containers canned tomatoes	1,255
Number of containers canned vegetables	115
Number of containers canned fruit	7,429
Number of girls making caps and aprons	194
Number of demonstrations held in homes	25
Number of labor-saving devices installed	5

The State Agent and Assistant summarize their personal work as follows:

Number of miles traveled	9,755
Number of visits to County Agents	42
Number of lectures and demonstrations given	55
Number of attendance	4,119
Number of visits to homes	51

A large amount of time of the specialists is spent in helping rural clubs by giving a series of lectures and demonstrations in Home Economics. A correspondence course is being prepared, and Miss Pritchett and her assistant also conducted a short course at College, in Domestic Science, and a number of similar courses in the State. Great difficulty has been experienced in securing trained County Agents. It is believed that women County Agents should be employed on a yearly basis, and only broadly trained agents secured for the work. We should endeavor to place the women agents upon the same basis as men, and expenses should be allowed for their travel in the counties. The girls' club work should be correlated with the public school work, as the boys' club work, and Miss Pritchett has suggested a plan which has been accepted by some counties, whereby the County Agent works through the schools of the county. The prize-winning girls were brought to Baltimore during "Maryland Week" and entertained by the Women's Clubs during their stay. The same business interests that contributed to the boys' trip aided the girls. A Home Economics booth displaying the work of this department was exhibited at the "Maryland Week" show. It is believed that Home Economics extension work is vitally important, not only in aiding the farm women in the home, but in developing the social life of the communities. Maryland ranks eighteenth among the States in the amount of funds devoted to Home Economics extension work for the past fiscal year.

Extension Work in Agronomy.

The work outlined in this project is being directed by Prof. N. Schmitz. Since Prof. Schmitz outlines the work he has conducted over a series of years, and states the results of the past season briefly, I deem it best to insert his discussion of the work with these crops as submitted:

"*Alfalfa*: The alfalfa work was begun in the fall of 1905. In 1906 an extensive survey of the alfalfa situation of this State was made by this Department. At that time this Station in cooperation with the Office of Forage Crop Investigations of the U. S. Department of Agriculture undertook, on an extensive scale, to demonstrate to the farmers of Maryland the feasibility of growing alfalfa. This work together with lectures given by the members of the College and Station staffs and by members of the Farmers' Institutes, created such an interest in alfalfa that in a few years the momentum which the alfalfa

movement developed kept the interest sufficiently strong so that about all that was necessary for this Department to do was to supply the information desired by the farmers interested in the crop. This accounts for the apparent decrease in the number of demonstrations, which in no way indicates that the interest in alfalfa has decreased. As a matter of fact, the interest is much greater today than it was ten years ago. The following table gives the number of demonstrations directly under the supervision of this department and the Department of Agriculture between 1905 and 1908, and those under the direct supervision of this Department alone for years 1909 to 1915. In connection with the demonstrations under direct supervision there have been each year, as the table shows, a number of fields started where personal advice only was given. These are cases where perhaps a visit was made to the farm, instructions given and then no further interest taken in the field other than what little may have developed incidentally through correspondence and otherwise. Besides this work there were every year about 100 or 150 farms advised in detail as to the proper methods of growing the crop, by correspondence only. The beginning of most of the alfalfa centers in the State can be traced to one or more of the demonstrations inaugurated several years ago.

Year	No. Farms Under Direct Supervision	Personal Advice
1905	10	
1906	150	
1907	175	
1908	100	
1909	70	10
1910	40	20
1911	16	32
1912	40	20
1913	31	42
1914	22	23
1915	14	38

Wheat: The wheat demonstrations began in 1911, and have constantly increased until there are 250 in 1916, as will be seen by the following table. The object in the wheat demonstrations is simply to introduce better varieties than are grown by the farmers and to demonstrate to the farmers the value of the best varieties.

Year	No. Demonstrations
1910-11	36
1911-12	25
1912-13	..
1913-14	140
1914-15	150
1915-16	250

Winter Oats: The demonstrations with winter oats began in 1911, and have constantly increased up to the present time, as will be seen by the following table. The objects are practically the same as those with the wheat demonstrations. Until this year practically none of the oats demonstrations were conducted in connection with the County Agents.

Year	No. Demonstrations
1910	11
1911	13
1912	17
1913	24
1914	33
1915	53

Corn: The records of this office show that the variety improvement demonstration work with corn was begun about 12 years ago. The number of demonstrations shown for each year in the table following does not in any way give an indication as to the actual work accomplished. By far the larger part of this work consisted in giving personal supervision in the way of breeding up and otherwise improving varieties of corn for our various conditions in the State. Practically every bushel of seed sold in this State with the exception of one or two minor varieties, was developed or improved under the personal supervision of someone from this Institution. The result has been that in about one-half of the State practically all of the old varieties have been replaced by improved varieties.

Year	No. Demonstrations
1907	11
1908	60
1909	26
1910	12 (127 boys)
1911	8
1912	17
1913	10
1914	15
1915	

Sudan Grass: The demonstration work with this crop has been continued for two years only, and the number of demonstrations are listed below.

Year	No. Demonstrations
1914	20
1915	90

Soy Beans: The value of soy beans has been demonstrated for two years. These demonstrations increased from 20 in 1914, to 90 in 1915.

Grass Fertilizers: The past season 26 grass fertilizer experiments were conducted.

Farms Visited: Since last spring I have visited 48 farms for giving of special advice. In 38 cases the visit was made for advising especially on growing alfalfa.

Farmers' Meetings: Since my last report I have addressed 33 farmers' meetings. Twenty-two of these meetings were in connection with the County Agent demonstration work. In addition to this I have conducted two movable schools, lasting 4 days in the week, and I have attended 6 fairs and 10 corn shows in the capacity of grain judge.

Demonstration Visits: In connection with the wheat and oats demonstration work, I have visited 105 demonstrations, and in connection with the Sudan Grass, Soy Beans and Grass Fertilizer Demonstrations I have visited 65 farms."

Farm Management.

The success of any farm depends upon its management. The farmer may be a specialist in any industry, either fruit-growing, dairying, etc., but he must know how to manage his soil, crops and live stock for greatest efficiency. Probably more farmers fail on account of lack of a comprehensive plan for rotation of crops and their management than any other cause.

Prof. W. T. L. Taliaferro, in charge of this branch is doing most valuable work in devising workable plans for the operation of farms on a successful basis. This work must cover the field of operations on a farm, and mold the specialties, if there are any, into successful practice, that will yield results without sacrificing fertility.

Plans for increasing the fertility of the soil, are suggested, also plans for the economic arrangement of buildings, handling of crops and live stock, and other details that come up under this subject.

Prof Taliaferro reports having visited 89 farmers for the above purpose, and aided the County Agents of Allegany, Anne Arundel, Baltimore, Charles, St. Mary's, Talbot and Worcester in farm management problems. In some cases it was necessary only to suggest better rotations and apply them to present conditions. Sometimes it has seemed better to formulate and recommend an entire rearrangement of the farm layout, so as to adapt it to more economic management.

Prof. H. T. Harrison is cooperating with the County Agents in inaugurating a simple system of farm accounting on several farms. The matter of keeping accounts is fundamental to the success of any business. Farmers, as a rule, generally neglect this phase of their business, and it is especially desirable that they be shown how simple accounting can be applied to the conduct of a farm.

Poultry Husbandry.

Prof. C. L. Opperman conducts the extension work under this project.

The project provides only for his employment during the winter months. His work is mainly conducted through County Agents, by movable schools, and by aiding farmers in suggesting better methods through demonstrations in feeding, breeding, egg production, incubation and marketing.

It is hoped that much more aid can be extended towards promoting this important industry in the State.

Movable Schools or Neighborhood Short Courses.

For sometime past there has been a demand in the State for movable schools. Not until the past year have we been in a position to give thorough and extended instruction which a community desires in any particular field of agriculture and home economics. These schools are not in any sense in the nature of a Farmers' Institute, but supplement that class of work. They serve to carry the short course in any particular subject to the farmer and farmer's wife. There are many who desire special instruction, but who are unable to leave home and take the short course at College. Only two subjects are given at any one course, which extends for four days at a given place.

It has been possible to conduct only a limited amount of movable school work, which has been so arranged in cooperation with the Director of Farmers' Institutes, that no community has been given aid in both classes of work.

The following short courses have been held:

Location:	Course:	Average Attendance:
Admiral, Anne Arundel Co.,	Poultry Husbandry Plant Diseases	36
Sudlersville, Queen Anne Co.,	Dairying Farm Crops	91
Principio, Cecil Co.,	Dairying Poultry Husbandry	40
Still Pond, Kent Co.,	Poultry Husbandry Farm Crops	30
Hampstead, Carroll Co.,	Poultry Husbandry Farm Crops	55
Mt. Airy, Carroll Co.,	Domestic Science	60
Woodfield, Montgomery Co.,	Dairying Farm Crops	35
Woodfield, Montgomery Co.,	Domestic Science	26
Brandywine, Prince George Co.,	Poultry Husbandry Farm Crops	40
Westminster, Carroll Co.,	Domestic Science	27
Eclo, Baltimore Co.,	Soils Poultry Husbandry	70
Eclo, Baltimore Co.,	Domestic Science	30

Extension Work in Dairying.

The dairy interests of this State are very important, and by virtue of our proximity to large cities, will continue to be a growing industry. Our dairymen need much information in handling their herds as well as their dairy products. The dairy extension work is in charge of Mr. G. E. Wolcott, who also represents the Dairy Division, U. S. Department of Agriculture.

Where possible, Mr. Wolcott conducts dairy extension work in cooperation with agents. His principal work has been the formation of Cow Testing and Breeders' Associations, building of silos, and aiding dairymen in giving advice in barn building.

The first Maryland Cow Testing Association was organized in September, 1910, and has since continued. Four other associations have been organized since that date, three of which were formed during 1915, with a total number of 55 dairymen, and herds aggregating 833 cows. Accurate records of each herd are kept. This work has been of inestimable value in demonstrating the importance of keeping records of production.

Breeders' Associations.

Two Guernsey Breeders' Associations have been formed during the past year, with 20 members in each. Much can be accomplished in improving the breed of stock, through these associations.

Silo: Much attention has been devoted by the specialist in promoting the building of silos in different counties of the State. Personal help was given in building seven silos, both cement and wood. He also assisted in building and remodeling four dairy barns. He attended three fairs, took part in five movable schools or short courses, made addresses at 23 dairy meetings, and has issued a course of twelve monthly lessons for use in rural schools; also, prepared a correspondence course in dairying. It is our hope, further, to emphasize this phase of extension work in Maryland.

Other Live Stock.

There is a large opportunity for increasing the raising of live stock, including horses, mules, sheep, swine and beef cattle in the State. Lectures and demonstrations have been conducted by Professors Ruffner, Buckley and Brigham. Project providing for a live stock specialist was submitted the past year to the Department, but rearrangement of funds in conference with Department officials caused same to be abandoned.

I believe that this should be one of the first lines of extension to properly provide for in the future. The County Agents have, of course, done a great deal along this line during the past year.

Rural Organization.

Prof. F. B. Bomberger and Prof. C. S. Richardson have, for several years, done a great deal of work in promoting rural organization. Only the past year has there been a definite project on this subject. The specialists have addressed about 60 farmers' meetings, traveled about 5,300 miles, written many letters, giving plans, by-laws, and suggestions for organization, to individuals and County Agents. They devote part time to the work.

A considerable part of the new organizations of rural people reported by the County Agents has been due to the cooperation of these specialists. One of the most notable achievements of the specialists has been the organization of the Montgomery County Community Service.

This is a federation of the following organizations: The County Granges, The Farmers' Convention, The Agricultural Society (Fair Associations), The Federation of Women's Clubs, The Social Service League, The Federation of Home and School Associations, The County Medical Society, The Equal Suffrage Association, The W. C. T. U., and The Just Government League. The object of the organization is

to enable the affiliated organizations to act cooperatively for the development of better economic, social and moral conditions throughout the country; to hold periodic conferences for the public discussion and study of Organization, Cooperation, Communication, Transportation, Production and Marketing of Agricultural Products, Education, Sanitation, Recreation, etc., and to encourage the utilization of all agencies calculated to promote civic betterment and the development of community life.

Horticultural Extension.

Demonstrations in Commercial and Home Culture of Orchards and Gardens.

This project has been in charge of Mr. S. B. Shaw. The following is a summary of his activities:

Pruning demonstrations	65	No. Present	806
Spraying demonstrations	20	" "	169
Packing demonstrations	6	" "	32
Planting demonstrations	1	" "	7
Orchards visited for advice	80	" "	..
Demonstration work in Baltimore County	19	days.	
Summer school work	3	"	
Maryland Week Exhibition	10	"	

This specialist has been in great demand by the County Agents, and the majority of demonstrations have been conducted in cooperation with them.

The plan of establishing permanent demonstrations in orchards and gardens extending over three years, as recited in the project, in conjunction with the County Agents should be a most effective manner of demonstrating the value of improved methods in orcharding and gardening.

Demonstrations in Controlling Brown Rot—Tomato and Potato Blight.

The work outlined in this project has been conducted by Prof. C. E. Temple; a summary of work is herewith given:

32 Spraying demonstrations with attendance of.... 409
32 Pruning demonstrations with attendance of..... 424
43 Public addresses with attendance of.....2,964
188 Calls to give advice.

Too much importance cannot be attached to demonstrating methods in the control of diseases, such as Brown Rot on Peaches, and Blight on Tomatoes and Potatoes. The Brown Rot demonstrations were very successful. This work should be extended to all peach-growing sections in cooperation with the County Agents.

Special attention will be given the spraying and treatment of tomatoes. This State packs nearly one-half of the tomatoes packed in this country. Blight causes severe losses each year, and we believe that every effort should be made by all the demonstration forces to aid in increasing production, by preventing, as far as possible, injury from blight. Prof. J. B. S. Norton, is devoting much time to the development of resistant varieties to blight.

The same may be said of the potato crop. It is an important crop to the State, and farmers need information in culture and treatment to prevent disease.

In addition to the above work conducted by Messrs. Shaw and Temple, Mr. W. C. Travers, who devotes most of his time to inspection work, conducted 35 pruning and spraying demonstrations, 8 demonstrations in packing apples, and 12 peach-packing demonstrations.

Rural Engineering.

This project is in charge of Professors T. H. Taliaferro, Harry Gwinner and Myron Creese. It provides for giving assistance to farmers through the County Agents in various phases of rural engineering. Special articles dealing with this subject have been issued, and conferences held, planning work in the State in drainage, installing heating and lighting systems, and suitable systems for sanitary disposal of waste for the ensuing year.

There are many problems in rural engineering that should be taken up, and it is hoped that a commendable start can be undertaken this coming season. The specialists devote part time to the work.

Miscellaneous Extension Work.

Landscape Gardening.

There has been an unusual demand for this character of extension work in the State. Such work should be encouraged, and every effort has been made to comply with the requests for plans in planting school grounds, decoration of rural homes, public institutions, etc.

Professor Anspon, who is not connected with the Service, has been able to devote much time to this work. He reports the following demonstrations:

Plans furnished for State or County Institutions	3
School grounds	6
Home grounds	18
Other demonstrations	3

As soon as practicable a whole-time specialist should be placed in charge of this work.

Baltimore City.

In an effort to render service to city dwellers, as well as the farmer, the Service offered the Mayor of Baltimore a given time, when our specialists could be at the call of all persons in the city who desired information or assistance about their gardens, plants or trees, and the control of insect pests and plant diseases. The Mayor extended every cooperation in the movement, by furnishing headquarters for the specialists at the City Hall, and an automobile at their disposal to visit all sections of the city.

Three weeks continuous service was devoted to the city, and one day each week during the summer a specialist was available in the city to aid all who desired assistance. There appeared to be a big demand for this service. Professors Anspon, Shaw and Temple conducted this work.

Correspondence Courses.

This phase of extension work was inaugurated by the Service in September, 1915. Mr. W. M. Hillegeist has charge of the Correspondence Study Department. Eighteen courses, treating of various phases of agriculture are now offered to the public. The courses are designed for those who wish to specially prepare themselves for pursuing any particular phase of agriculture and allied industries, but who cannot leave their home or their present occupation to go to college or even take a short course.

The courses are prepared for the farmer or farmer's wife, boys and girls on the farm, professional, business or working men who wish to gain general information, or those who wish to specialize in some branch of farming. About 56 students are enrolled in our correspondence study department.

Special Service to Banks.

Special articles bearing on the agriculture of a community have been prepared for various banks in the State, to be distributed to their depositors, who are farmers. In this way the banking officials in rural districts more thoroughly appreciate the importance of promoting farming and the farmers appreciate the special service rendered.

Maryland Week.

While "Maryland Week" is a distinctly State affair, yet, it is but a representation of what the College has done through the State Associations, affiliated for holding the annual meetings and exhibition. Members of the Extension Service are secretaries of the Associations, and on them fall the burden of getting up and conducting the show and meetings. The 1915 exhibition far surpassed previous ones, and much greater interest was manifested by the farmers of the State.

Special Work.

In addition to the above recited work of the specialists, there is a demand for miscellaneous extension work, which the Service must meet, such as judging at fairs, speaking at farmers' picnics, and incidental meetings; giving lectures and demonstrations at community club meetings, in order that these clubs may arouse interest and serve as sources of inspiration to the communities.

The Institution has been doing such work for several years, and while it is desirable to reduce such work, as judging at fairs to the minimum, yet, such work is useful and helpful to the communities, and must be taken care of by the Service. All the specialists have aided in doing this work during the past year.

Conclusion.

It is believed that the extension and demonstration work in Maryland has made commendable progress during the past year. Farmers and other citizens are extending every cooperation to our workers. We have been badly handicapped for the need of State funds, which has prevented the Service doing much that is needed and desired by the people. We approach the new year with enthusiasm and determination to place the work upon a substantial basis to command the attention and support of all our rural interests.

Too much credit cannot be given all workers, especially the College men, who have aided in the extension work, and oftentimes made many sacrifices in order to do their part in making the work a success.

The Extension Service and the Director are under deep obligations to President Patterson for the many suggestions and the earnest cooperation he has extended the work.

FINANCIAL REPORT.

THE MARYLAND AGRICULTURAL EXTENSION SERVICE

In account with

The United States Appropriation Under Smith-Lever Extension Act, 1914-1915.

Dr.	Smith-Lever Fund.
To receipts from the Treasurer of the United States, as per appropriations for fiscal year ended June 30, 1915, under act of Congress approved May 8, 1914 (Smith-Lever Act)	$10,000.00

Cr.	Abstract.
By Salaries	$5,212.92
Labor	889.73
Publications	157.50
Stationery and small printing	176.35
Postage, telegraph, telephone, freight and express	189.04
Supplies	609.19
Tools, machinery and appliances	95.79
Furniture and fixtures	322.84
Scientific apparatus and specimens	603.79
Traveling expenses	1,742.85
	$10,000.00

We, the undersigned, duly appointed Auditors of the Corporation, do hereby certify that we have examined the books and accounts of the Agricultural Extension Service for the fiscal year ending June 30, 1915; that we have found the same well kept and classified as above; that the receipts for the year from the Treasurer of the United States were $10,000 under the act of Congress of May 8, 1914, and the corresponding disbursements $10,000; for all of which proper vouchers are on file and have been by us examined and found correct, leaving a balance of nothing.

And we further certify that the expenditures have been solely for the purposes set forth in the act of Congress approved May 8, 1914, and in accordance with the terms of said act.

(Signed) THOS. V. BARB,
State Auditor.

(Seal of Institution.)

Attest:
WIRT HARRISON,
Custodian.

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS EXCEPT THOSE FROM THE FEDERAL DEPARTMENT OF AGRICULTURE, USED FOR EXTENSION WORK.

For Fiscal Year Ending June 30, 1915.

Items of expense.	Administration	Printing and distribution of publications	County agents	Home economics	Movable schools and farmers' courses	Agronomy	Farm management	Poultry husbandry	Stenog. and clerical labor	Pomology	Landscape gardening	Plant disease	Dairy husbandry	Total.
Salaries	$2,874.81	$	$1,566.24	$	$442.33	$1,299.96	$900.00	$312.50	$	$1,883.32	$	$1,800.00	$1,500.00	$15,579.16
Labor									1,008.73					1,008 73
Publications		157.50												157.50
Stationery and small printing	200.00	75.00				50.00	21.35		30.00				75.00	451.35
Postage, telegraph, telephone, freight, and express	214.04				50.00				184.00	16.00	25.00			489.04
Heat, light, water, and power														
Supplies	75.00	100 00		134.19	125.00				100.00	100.00	150.00	150.00	63.00	997.19
Library														
Tools, machinery and appliances	80.00			50.79	45.00				72.00			50.00	100.00	397.79
Furniture and fixtures	75.00	122.84			100.00	50.00			145.00	50.00	17.00	10.00	100.00	669.84
Scientific apparatus and specimens				134.92		216.23	3.50			40.60	208.54			603.79
Live stock														
Traveling expenses	411.65			153.08	679.19	182 31	121.89	89.55	100.00	396 71	170.43	196.04	411.00	2,911.85
Contingent expenses														
Total	$3.930.50	$455.34	$4,566.24	$472.98	$1,441.52	$1,798.50	$1,046.74	$402.05	$1,639.73	$2,486.63	$570.97	$2,206.04	$2,249.00	$23,266.24

APPROXIMATE ALLOTMENT OF FUNDS (EXCEPT THOSE FROM FEDERAL DEPARTMENT OF AGRICULTURE) USED FOR EXTENSION WORK FOR FISCAL YEAR ENDING JUNE 30, 1916.

	Smith-Lever.	State Horticultural.	State Demonstration.	County Appropriation.
Administration	$2,600.00	$2,140,00	$	$
Printing and distribution of publications	500.00	.....	500.00	.....
County agents	1,680.00	.....	.....	9,460
Home economics and Girls' Clubs	4,700.00	.....	.....	1,590
Movable schools	466.73	.....	.....	....
Boys' Clubs	1,230.00	.....	.....	.....
Horticulture	500.00	1,750.00	.....	.....
Plant diseases	400.00	1,800.00	.....	.....
Dairy husbandry	.....	.....	1,320	.....
Agronomy	1,500	.....	.....	....
Poultry husbandry	400.00	.....	.....	.....
Rural organization	600.00	.....	.....	.....
Rural engineering	440.00	.....	.....	.....
Farm management	1,600.00	.....	.....	.....
Animal industry	730.00	.....	.....	.....
Negro demonstration work	350.00	.....	.....	.....
Correspondence courses	.....	.....	500.00	.....
Travel and miscellaneous demonstration work	.....	.....	680.00	.....
	$17,746.73	$5,690.00	$3 000.00	$11,050

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